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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,821	03/15/2004	Kerry Dennis Brown	MLF 670-03	1621

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EXAMINER

NILFOROUSH, MOHAMMAD A

ART UNIT	PAPER NUMBER
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3685

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/800,821	Applicant(s) BROWN, KERRY DENNIS	
	Examiner MOHAMMAD NILFOROUSH	Art Unit 3685	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 November 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-26, 28 and 29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22-26, 28 and 29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Acknowledgements

1. The amendment filed 28 November 2008 is acknowledged.
2. Claims 22-26 and 28-29 are pending.
3. Claims 22-26 and 28-29 have been examined.
4. This Office action is given Paper No. 20090213 for reference purposes only.

Continued Examination Under 37 CFR 1.114

5. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 28 November 2008 has been entered.

Response to Amendment/Arguments

6. The previous rejection of claims 14-15 and 21-27 under 35 USC § 112 is rendered moot by Applicant's cancellation of claims 14-15 and 27.
7. Applicant's arguments filed 28 November 2008 have been fully considered but they are not persuasive.
8. It is the Applicant's position that "...Cooper mentions some function their card could perform, but Cooper does not describe any circuit or method that would actually

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enable the function.” Applicant further states that “The Office also cites the card described in Cooper as ‘presenting said complete valid user account data to said programmable magnetic array for a limited time after being triggered by said card-swipe detector’... Cooper does not show the circuits or methods to do any of these, and none of them relate to a time-out that causes the complete valid user account data to said programmable magnetic array to be withdrawn.”

9. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the implementation details of the circuits or methods involved in presenting data on a magnetic stripe for a limited time after being triggered by a card-swipe detector) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

10. The remainder of Applicant's arguments with respect to claims 22-26 and 28-29 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

11. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

12. Claims 22-26 and 28-29 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject

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matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

13. Specifically, claims 28 and 29 recite “...a *linear combination* of permanent data bits and programmable data bits...” The recited “linear combination” was not previously disclosed in the specification.

Claims 22-26 are also rejected as each depends from claim 28.

14. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

15. Claims 22-26 and 28-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

16. Claims 28 and 29 recite “...said unique transaction encoding is only readable via said linear combination of permanent data bits and programmable data bits...” It is unclear to one of ordinary skill how the data bits, rather than the magnetic stripe, can be used to read a transaction encoding. An essential purpose of patent examination is to fashion claims that are precise, clear, correct, and unambiguous. Only in this way can uncertainties of claim scope be removed (*In re Zletz*, 13 USPQ2d 1320 (Fed. Cir. 1989)).

Claim 22-26 are also rejected as each depends from claim 28.

Examiner's Comments

17. Applicant's claims employ language that does not serve to distinguish the claims over the prior art.

18. Claims 28 and 29 recite "...triggering said data generator...*when* swiped by a read head..." (emphasis added) and "...sending a unique transaction encoding...*when* triggered..." (emphasis added). The triggering of the data generator is conditional on the card being swiped by a read head, and sending a unique transaction encoding is conditional on the data generator being triggered. Thus, these steps may or may not be performed depending on whether or not their respective conditions are met.

Accordingly, once the positively recited steps are satisfied, the method as a whole is satisfied -- regardless of whether or not other steps are conditionally performed under certain other hypothetical scenarios. (*In re Johnston*, 77 USPQ2d 1788 (CA FC 2006); *Intel Corp. v. Int'l Trade Comm'n*, 20 USPQ2d 1161 (Fed. Cir. 1991); MPEP §2106 II C). Thus, these limitations do not serve to differentiate the claims from the prior art.

Claim Rejections - 35 USC § 103

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

20. Claims 25 and 28-29 rejected under 35 U.S.C. 103(a) as being unpatentable over Cooper (US Patent No. 5,834,747) in view of Geiselman et al. (US Patent No.

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6,466,780, hereinafter "Geiselman") and further in view of Singh (US Patent Application Publication No. 2002/0032657).

21. Regarding claims 28 and 29, Cooper discloses a payment card and a method for operating the payment card, comprising:

- constructing a single series of magnetic data on a magnetic stripe of a payment card to include programmable data bits (Figure 2, programmable magnetic strip 4 on plastic substrate 3, col. 2 ll. 45-62; col. 3, ll. 6-19; col. 4 ll. 26-29; col. 5, ll. 21-26 Figure 4, magnetic strip 10, electromagnet coils 21, col. 7 ll. 5-38);
- controlling said programmable data bits with a data generator and magnetic-transducer write heads located immediately under corresponding bit positions of said magnetic stripe (col. 3, ll. 14-27; col. 4 ll. 26-47; col. 5, ll. 21-26; col. 6, ll. 54-61; Figure 4, magnetic strip 10, electromagnet coils 21, col. 7 ll. 5-38);
- triggering said data generator when swiped by a read head in a legacy card reader (col. 3, ll. 43-47);
- sending a unique transaction encoding from said data generator, when triggered, to said magnetic-transducer write heads (col. 3, ll. 14-27; col. 5, ll. 51-56; col. 6, ll. 51-61);
- wherein, said unique transaction encoding is only readable via said programmable data bits by said legacy card reader for a limited time or a limited number of card swipes or transactions (col. 3, ll. 43-47; col. 6, ll. 51-57).

Cooper does not specifically disclose that the magnetic stripe includes a linear combination of bits including permanent data bits. Also, although Cooper states that the

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card is able to detect when a card is swiped through a card reader, Cooper does not explicitly state that the card has a card-swipe detector proximate to said magnetic stripe.

Geiselman discloses a card with a magnetic stripe that includes a linear combination of programmable and permanent data bits (col. **11**, ll. **26-38**; col. **12**, ll. **1-7**, **28-30**).

Cooper in view of Geiselman does not explicitly state that the card has a card-swipe detector proximate to said magnetic stripe.

Singh discloses a card with a card-swipe detector proximate to the magnetic stripe (Figure **2**, Swipe Detector **6**; Paragraphs **13**, and **16-17**).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the magnetic stripe on the payment card of Cooper to include a linear combination of programmable and permanent data bits as disclosed in Geiselman in order to prevent a card with an account number stored permanently on the magnetic stripe from being used by an unauthorized individual (Geiselman, Col. **11**, ll. **64-67**) Further, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the payment card of Cooper in view of Geiselman to include a card-swipe detector proximate to the magnetic stripe as disclosed in Singh in order to output data on the magnetic stripe only when the card is being swiped (Cooper, col. **3**, ll. **43-47**; Singh Paragraph **13**).

22. Regarding claim 25, Geiselman discloses requiring a user to enter a personal identification number (PIN) before allowing said unique transaction encoding to be accessed by said legacy card reader (col. **11**, ll. **1-9**).

23. Claims 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cooper in view of Geiselman, in further view of Singh, and further in view of Kreft, et al. (US Patent No. 6,068,193, hereinafter "Kreft").

24. Regarding claims 22 and 23, Cooper in view of Geiselman in further view of Singh does not specifically disclose collocating a smartcard contact interface or a wireless smartcard contactless interface with said single series of magnetic data on a magnetic stripe within said payment card.

Kreft discloses a payment card with a magnetic stripe and a smartcard contact interface (Figure 1, contacts 6 and magnetic strip 11; col. 1, ll. 43-55) along with a contactless interface (Figure 1, circuit 2 with contactless data transfer portion 3; col. 1, ll. 43-55; col. 1, l. 65 to col. 2, l. 4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the card of Cooper in view of Geiselman and in further view of Singh to include a smartcard contact interface as disclosed in Kreft in order to be able to reload or reprogram the data to be written to the magnetic strip (Kreft, col. 2, ll. 61-63; Col. 3, ll. 33-41) and to be able to transfer data typically stored on a magnetic stripe wirelessly to relieve the inconvenience of having to determine the correct orientation to slide a magnetic stripe through a card reader (Kreft, col. 3, ll. 17-22).

25. Claims 24 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cooper in view of Geiselman, in further view of Singh, in further view of Teicher, et al. (US Patent No. 6,257,468, hereinafter "Teicher"), and further in view of Kreft.

26. Regarding claims 24 and 26, Cooper discloses sharing a processor in support of the single series of magnetic data on the magnetic stripe (col. **3**, l. **63** to col. **4**, l. **25**).

Cooper in view of Geiselman, in further view of Singh does not specifically disclose that that the microprocessor is a crypto-processor and that it is shared in support of a smartcard contact interface. Cooper in view of Geiselman, in further view of Singh further does not specifically disclose using data received by said smartcard interface to affect data presented later by said single series of magnetic data on a magnetic stripe to a legacy card reader.

Teicher discloses a smart card with a cryptographic module in support of an interface that encrypts all communications to a card reader (Figure **10**, electrical contacts [interface] **104**; Figure **11**, encryption/decryption/reader verification module **854**; col. **13**, ll. **52-56**; col. **14**, ll. **28-32**; col. **8**, ll. **36-39**).

Cooper in view of Geiselman, in further view of Singh, further in view of Teicher does not specifically disclose using data received by said smartcard interface to affect data presented later by said single series of magnetic data on a magnetic stripe to a legacy card reader.

Kreft discloses that data written through the contacts on the card affects data presented by the magnetic strip (col. **2**, ll. **61-63**; col. **3**, ll. **33-36**)

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the card of Cooper in view of Geiselman, further in view of Singh to include a processor to encrypt communications transmitted via a smartcard interface to a reader as disclosed in Teicher in order to prevent unauthorized interception of personal data. Also, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the card of Cooper in view of Geiselman, in further view of Singh, and further in view of Teicher to allow data to be presented on the magnetic strip to be programmed through the contacts on the card as disclosed in Kreft in order to only allow authorized parties to alter the memory of the card (Kreft, Col. **2**, ll. **53-64**).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MOHAMMAD NILFOROUSH whose telephone number is (571)270-5298. The examiner can normally be reached on Monday-Thursday 8 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Calvin Hewitt can be reached on (571)272-6709. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. N./

Examiner, Art Unit 3685

/Calvin L Hewitt II/

Supervisory Patent Examiner, Art Unit 3685